APPENDIX I

Appendix I

State Stormwater Management Regulations

In 1990, the **Virginia Department of Conservation and Recreation (VDCR)** enacted the *State Stormwater Management Regulations (VR 215-02-00)*. These regulations implement the 1989 *State Stormwater Management Law* (Code of Virginia, 10.1-603.1 to 10.1-603.15) which was designed to provide clear enabling authority for local stormwater management programs in Virginia. The state regulations, which are voluntary for local governments, assume that a local government must adopt the regulations in their entirety in order to demonstrate clear enabling authority for a local stormwater management program. The state regulations require the control of stormwater pollution and peak flows discharged by new development. The stormwater pollution control requirements specify minimum standards for three different structural BMPs (i.e. wet detention basin, extended detention dry basin, infiltration facility), including design criteria.

State Erosion Control Regulations

These regulations *(VR 625-02-00)*, which are enforced by **VDCR**, specify minimum standards for the control of soil erosion and sediment deposition from construction sites. The regulations specify structural and nonstructural controls for construction site conditions. These regulations are mandatory for all new development in Virginia.

NPDES Stormwater Permitting Program

In 1992-1993, Virginia cities and counties with populations of 100,000 or greater filed NPDES stormwater permit applications with the **Virginia Department of Environmental Quality (DEQ)** pursuant to the federal *Clean Water Act*. These municipal permit applications specify comprehensive stormwater management programs which will be implemented by each municipality during the 5-year NPDES permit term.

Hazardous and Solid Waste

The **Waste Division of DEQ** administers the state's *Hazardous Waste* Management (VR 672-10-1) and *Solid Waste Management Regulations* (VR 672-20-10).

- **Solid Waste Management**

  Local governments in Virginia are required to provide proper disposal of solid waste in accordance with DEQ's regulations. Many of the cities, counties, and towns in Virginia accept nonhazardous solid wastes from commercial sources within their jurisdiction for disposal in the same facility used for residential wastes. No liquid wastes may be disposed of in a solid waste landfill.

  If a business elects to operate its own solid waste management facility, it must obtain a permit for the facility from the DEQ. Prior to applying for a state permit, the applicant also is required to obtain approval or certification of compliance with local land use regulations and, if applicable, siting approval from the appropriate local government.

- **Hazardous Waste Management**

  Anyone who generates, transports, stores, treats, or disposes of hazardous waste in Virginia is subject to Hazardous Waste Management Regulations. The purpose of these regulations is to control all hazardous wastes that are generated or transported in Virginia. The waste generator is responsible for packaging, labeling, marking, and placarding hazardous material prior to transporting. A generator may not accumulate hazardous waste on-site for more than 90 days without becoming subject to additional regulations which apply to operators of permitted hazardous waste storage facilities. Those generating less than 220 pounds per month may be exempt from the full scope of the regulations, but are encouraged to recycle and reuse.

- **Hazardous Waste Management Facilities**

  Hazardous waste management facilities are regulated by the DEQ and require a state permit. Application for a permit must be made by anyone who intends to treat, store, or dispose of or in some way operate hazardous waste management facilities. Applications for a permit requires a detailed filing and lengthy public participation process.

- **Toxic Substances**

  The Waste Division keeps records on the locations and amounts of toxic substances. Commercial establishments manufacturing or using chemical substances in manufacturing are required to file inventory reports. (Note: See the section on the Virginia Department of Health for overlap in this program.)

NPDES/Water Quality

The **DEQ Water Division** administers the *NPDES Permitting Program*, the state *Water Quality Standards Regulations* (VR 680-21-00), and the state's *Groundwater Withdrawal Regulations* (VR 680-13-07).

- **Virginia Pollutant Discharge Elimination System (VPDES) Permit**

  This permit is required where there is a point source discharge of pollutants to surface waters. The permit includes effluent limitations, self-monitoring requirements, and reporting requirements.

- **Toxic Management Program**

  This program was established for the purpose of controlling the levels of toxic pollutants in surface waters from point source discharges. As VPDES permits are processed a etermination on the need for a toxics management program is made. An owner is required to biologically and chemically monitor for toxic pollutants. If the results of this monitoring indicates the toxicity does or may exist then a toxicity reduction program is required as a condition of the VPDES permit.

- **Pretreatment Program**

  Certain publicly owned wastewater treatment works are required to have a pretreatment program designed to control the industrial discharges into their sewerage system. The pretreatment program is implemented at the local level with approval and overview from DEQ. Where an approved program is required, it will be included as a condition of the VPDES permit issued to the locality.

- **Virginia Pollution Abatement (VPA) Permit**

  This permit is required where an owner manages the pollutants without having a point source discharge to surface waters. It is applicable where the wastewaters or sludges are land applied or recycled. The permit includes management requirements, self-monitoring, and reporting requirements.

Septic Tanks/Wastewater Treatment

The **Virginia Department of Health (VDH)** administers the state's *Sewage Handling and Disposal Regulations*, which cover the design of septic tank systems and other residential sewage disposal systems, and the state's *Sewage Collection and Treatment Regulations*, which include design standards for sewer systems, pumping stations, and wastewater treatment plants.

Toxic Substances

VDH is designated as the State Toxic Substances Information Agency, and along with DEQ'' Waste Division, keeps records on the locations and amounts of toxic materials. Commercial establishments manufacturing or using chemical substance in manufacturing are required to file inventory reports. (Note: See the section on DEQ's Waste Division for overlap in this program.)

This information is available to state agencies for use in regulatory matters.

Policies/Regulations Covering Point Source Discharges

The **Virginia DEQ** has established more stringent effluent limits for wastewater treatment plant discharges in selected water supply watersheds in the State of Virginia. Examples include the *1971 Occoquan Watershed Policy* which requires a limited number of advanced wastewater treatment (AWT) facilities in the 580 sq-mi watershed, and the *Chickahominy River Watershed Policy* which sets stringent effluent limits for wastewater discharges upstream of the Newport News Waterworks intake at Walker's Dam.

Other watersheds of public water supplies have typically been designated by **DEQ** as separate stream/river sections for the purposes of setting water quality standards and effluent limits for upstream wastewater discharges (**State Water Control Board** *Water Quality Standards Regulations*, VR 680-21-00). The designated "PWS" section of the stream/river usually begins at the intake point, and extends at least 5 miles upstream -- or the designation may include the entire upstream watershed.

In most water supply waterworks, **DEQ** and the **VDH** enforce a minimum separation distance of 5 miles between the water supply intake and any new point source discharge. The minimum separation distance of 5 miles is based on *Section 15.1-292 of the Code of Virginia*, which specifies that local governments may prevent water pollution within 5 miles of a water supply intake. **DEQ's** *Occoquan Watershed Policy* specifies a more stringent minimum separation distance (15- to 20-miles).

The Chesapeake Bay Local Assistance Department administers the Chesapeake Bay Preservation Act of 1988. This Act established a cooperative state and local program to protect water quality in Chesapeake Bay and its tributaries through improved land use planning and management. In 1990, the Chesapeake Bay Local Assistance Board promulgated the Chesapeake Bay Preservation Area Designation and Management Regulations (VR 173-02-01). The Regulations are mandatory for all Tidewater counties, cities and towns, and may be adopted on a voluntary basis by localities in other areas of the state. The Regulations require localities to designate Resource Protection Areas and Resource Management Areas, based upon the presence of certain environmental features where improper development would have an adverse effect on water quality. The Regulations also require localities to incorporate measures into their land use management ordinances that protect the water quality of the Bay and its tributaries.

For any new urban development, the post-development stormwater pollution load must not exceed the pre-development load based on average land cover conditions. Redevelopment projects must achieve at least a 10% reduction in stormwater pollution loading of total phosphorus, the "keystone" pollutant, compared to existing conditions. This is achieved through preserving indigenous vegetation, limiting the area of land disturbance, minimizing impervious cover, and using structural BMPs where necessary. The Regulations also require septic system pumpouts every five years, reserve septic drainfields, and soil and water conservation plans for all land where agricultural activities are being conducted, among other measures.

In addition, the Regulations require localities to consider the protection of potable water during development of their comprehensive plans. This involves identification of surface and groundwater supply systems, determination of existing and future demand, assessment of the quality of the source waters, identification of possible point and nonpoint sources of pollution, determination of the impacts future land use and population growth will have on the quality of the water supply, and the formulation of policy and management strategies designed to protect this resource.

If a watershed is included within a Chesapeake Bay management area, the requirements of the Regulations could serve as the basis for controlling both agricultural and urban stormwater pollution. If the current Chesapeake Bay management areas do not cover any or all of the water supply watershed in a particular jurisdiction, the local government could elect to expand the boundaries of the management areas to address water supply watershed management needs.